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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,807	02/13/2002	Yoshimitsu Takayama	SUSU118702	6219

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EXAMINER

MARIAM, DANIEL G

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/049,807

Applicant(s)

TAKAYAMA, YOSHIMITSU

Examiner

DANIEL G. MARIAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 9-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7 and 8 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13-February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>05172005</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02132002</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-8, drawn to comparing deviation between digital data representing at least one of a shape, area, and color of a target work to be identified and a pre-stored digital data.

Group II, claim(s) 9-16, drawn to inserting one of a signature data into one of the work data in response to a request received through a network from a requester.

Group III, claim(s) 17-20, drawn to comparing/collating an object signature data transmitted from a requester through a network and the signature data stored in the signature storage and return a result of the comparison to the requester.

2. The inventions listed as Groups I, II, and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical feature of the Group I invention is a system for comparing/collating deviation between at least one of shape, area, and color of a target work to be identified with a stored work while the special technical feature of Group II inserts a signature into one of the work data on the basis of a request through a network by a requester. Since the special technical feature of the Group I invention is not present in the Group II claims, and the special technical feature of the Group II

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invention is not present in the Group I claims. The special technical feature of the Group III invention is a system compares an object signature data transmitted from a requester through a network and return a result to the requester, while the special technical features of Group I and Group II is a system as identified-above. Since the special technical feature of the Group I II invention is not present in the Groups I & II claims, and the special technical feature of the Groups I & II inventions are not present in the Group III claims, Groups I, II, and III do not relate to a single general inventive concept.

3. During a telephone conversation with Jeffrey M. Sakoi on May 17, 2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-8.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 8 recites the limitation "works" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 and 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Crane, et al. (4,040,010).

With regard to claim 1, Crane, et al discloses a work, i.e., symbol or signature constructed by a person, storage, i.e. register, configured to store digital data representing at least one of a shape, i.e., signature or symbol, area, and color of an only one work, i.e., a template; a collation section, i.e., comparator, configured to calculate a degree of deviation, i.e., difference, between digital data representing at least one of a shape, area and color of a target work, i.e., test signature or sample vector, to be identified and the digital data stored in the work storage; and a test section, i.e., thresholding, i.e., configured to perform a test of hypothesis based on a predetermined hypothesis using the degree of deviation (if the difference between the template and the test/sample signature is greater than a predetermined value, then the sample signature is determined a forgery, and if less than the predetermined value, the signature is determined genuine) (See for example, col. 1, line 38 through col. 2, line 46).

With regard to claim 3, the system according to claim 1 wherein said test section performs the test using a variance of the degree of deviation (See for example, col. 2, lines 29-45).

With regard to claim 4, the system according to claim 1, wherein said test section performs the test using a mean of the degree of deviation (See for example, col. 9, lines 7-32)

8. Claims 1-2, 5, and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Denenberg, et al. (5,673,338).

With regard to claim 1, Denenberg, et al. (hereinafter "Denenber") discloses a work; i.e.,

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art object or artwork or item, storage, i.e., central computer, configured to store digital data representing at least one of a shape, area, and color of an only one work i.e., artwork or art object (See item 100 and 54 in Fig. 3; and Figs. 5 and 6); a collation, i.e., comparing, section configured to calculate a degree of deviation, i.e., anomalies or irregularities or divergence, between digital data representing at least one of a shape, area and. color of a target work, i.e., artwork or item to be verified, to be identified and the digital data stored in the work storage (col. 11, line 56 through col. 12, line 7; col. 12, line 64 – col. 13, line 19); and a test section, i.e., auto correlation, i.e., configured to perform a test of hypothesis based on a predetermined hypothesis using the degree of deviation (At col. 13, lines 58-65, Denenberg states: "Once the final level of magnification has been achieved and successful visual correlation between objects and reference data exists, a machine correlation (sometimes referred to as autocorrelation) may be performed to quantify the degree of match between the object and the high-magnification reference image. A pixel-by-pixel correlation, performed by the host (central) computer, yields a numerical percentage correlation factor as represented in FIG. 7 . . . and at col. 14, lines 29-39, Denenberg further states: For qualitative results, the system of the invention achieves autocorrelation preferably by taking the reference image and producing a reverse (negative) of the reference image, then superimposing that reverse image with the image being investigated. The superimposed images are reviewed pixel by pixel. **If** (emphasis added by the Examiner) autocorrelation is found, the positive and negative images will produce a nearly perfect neutral grey, with all overlying values averaging to the grey. **If** (emphasis added by the Examiner) the images are slightly offset or even rotated, certain recognizable patterns will emerge, leading the operator to take obvious corrective positioning steps."

With regard to claim 2, the system according to claim 1, wherein said work storage stores the digital data representing at least one of a shape, area and color of a signature attached to the only one work, i.e., artwork (See for example, col. 5, lines 56-61); and said collation section calculates the degree of deviation between digital data representing at least one of a shape, area and color of a signature attached to the target work and the digital data stored in the work storage (See for example, col. 5, line 64 through col. 6, line 4).

With regard to claim 5, the system according to claim 2, wherein said collation section calculates the degrees of deviation for sub regions dividing the signature in a matrix manner (See Figure 7).

With regard to claim 7, the system according to claim 1, wherein said test section determines whether the target work is identical to the only one work (See for example, col. 3, line 60 through col. 4, line 45).

With regard to claim 8, the system according to claim 1, wherein said work storage stores the digital data of plurality of only one works, and said test section searches said work storage to find one of the only one works which is most similar to the target work (See for example, col. 5, lines 37-55; col. 6, lines 45-50; and col. 7, lines 9-35).

Allowable Subject Matter

9. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Numbers: 4918723 and 6611598; European Patent No. EP0523908A2; and a publication to: Clark, R. M, et al. "A model for comparing signatures".

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G. MARIAM whose telephone number is 571-272-7394. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH M. MEHTA can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DANIEL MIRIAM
PRIMARY EXAMINER

May 23, 2005